



Department of Building Standards

COLUMBIA COUNTY

Footing and Foundation Seminar

VOLUME 6 MAY 2003 INSIDE THIS ISSUE

Seminar	1
Permit Statistics	1
Brown Bag Lunch	2
Water—#1 Complaint	2
Certificate of Occupancy	3
Earthquake Loads	3
Reminder	4

2003 PERMITS YEAR TO DATE

Building	256
Electrical	626
Plumbing	388
Mechanical	454

Total Revenue 2003

\$176,424

INSPECTIONS

JAN 1 - MAR 31, 2003

4,243

The Columbia County Department of Building Standards and the Builders Association of Metro Augusta, Inc. will be presenting a seminar on footings and foundations August 27, 2003, at the Savannah Rapids Pavilion beginning at 8:30 AM. The seminar will cover Chapter 4 of the *2000 International Residential Code* that includes the design and construction of foundations and foundation spaces for buildings.

Those who should attend:

1. Residential Builders
2. Landscape Contractors
3. Masonry Contractors
4. Footing Excavation Contractors

Tentative Course Schedule:

8:30 AM – 9:00 AM Opening Remarks

Session 1. 9:00 AM – 11:30 AM.....Section Drainage (Builders and Landscape Contractors)

Session 2. 12:30 PM - 2:00 PM..... Footings (Builders and Footing Excavation Contractors)

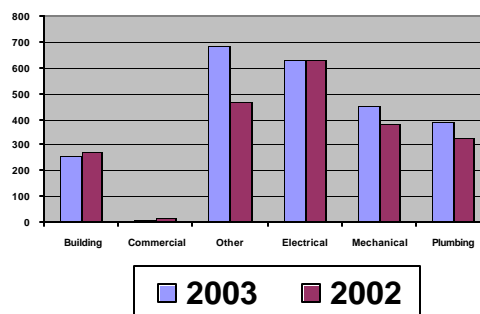
Session 3. 2:00 PM - 3:30 PM..... Foundation Walls (Builders and Masonry Contractors)



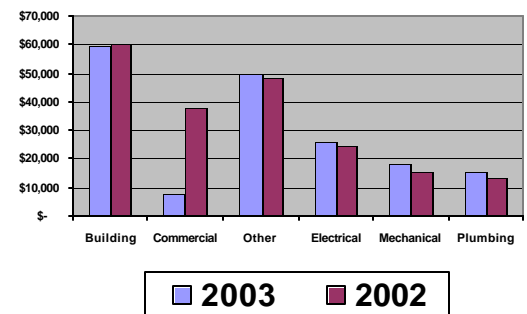
The seminar sessions are limited to 60 participants per session. Please call the Builders Association at 860-2371 to reserve a session. You need to attend only the session relating to your type of construction.

FIRST QUARTER PERMIT STATISTICS

PERMITS



PERMIT REVENUE



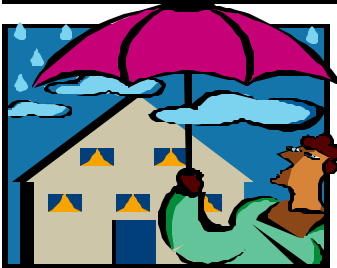
BROWN BAG LUNCH



The Department of Building Standards is beginning a brown bag lunch time on May 14th with some of the staff and contractors. This will be a weekly meeting in which contractors can discuss any item they want to discuss. Brown bag means—bring your own lunch. We will be meeting during the 12:00 noon—1:00 PM lunch hour. You will need to bring your own lunch, and the staff will provide drinks. The meeting will last no longer

than 1 hour and 15 minutes and will be limited to 5 contractors per meeting.

You will need to call 312-7268 and speak to Donna Hall for reservations. If you do not make the list on the Wednesday of that week, then your name will be rolled over to the next week. This will be an informal time to ask questions, voice opinions, discuss issues and talk codes.



Water—#1 Complaint

The number one problem that is received by the Building Standards Department has to do with water. Whether it is water in a yard, water around a foundation or a roof leak, the lack of the control of water is a problem.

There are several sections in the *International Residential Code* that help to eliminate or minimize the problem.

Section R401.3 of the IRC states the following: "Surface drainage shall be diverted to a storm sewer conveyance or other approved point of

collection so as to not create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of 6 inches within the first 10 feet." A companion code section to R401.3 is R801.3 which states: "In areas where expansive or collapsible soils are known to exist, all dwellings shall have a controlled method of water disposal from roofs that will collect and discharge all roof drainage to the ground surface at least 5 feet from foundation walls or to a approved drainage system."

Section R401.3 clearly indicates that surface drainage must be diverted to some type of storm

conveyance or to a point of collection that will not create a hazard. This section also requires a minimum of 6 inches of fall in 10 feet away from foundation walls with the exceptions listed when this is not possible.

Section R801.3 requires gutters and downspouts to divert roof drainage away from foundation walls to prevent drainage to their foundation when expansive soil exist. In Columbia County most areas have expansive soils and gutters need to be used in these cases along with the fall away from the foundation walls.

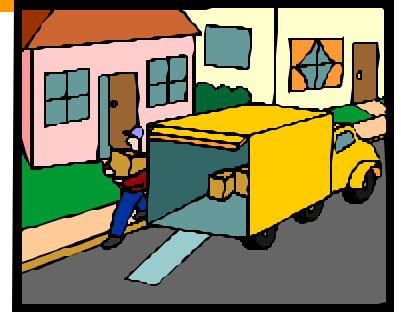
Builders need to be aware that one of the most important

considerations in construction is the arrangement of structures on a building site. A building site should retain its natural drainage patterns and care should be taken not to alter or disturb existing grades. If the builder will keep these factors in mind then the result will be a reduction of ground stabilization problems and help eliminate foundation problems resulting from differential settlement through the reduction in the use of fills.

In actuality the proper design of drainage is beyond the scope of the code and builders should follow standard engineering practices.

CERTIFICATE OF OCCUPANCY

Prior to a building being occupied a certificate of occupancy must be issued by the building official. Section R110.1 of the 2000 *International Residential Code* states the following:



"No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid."

A building cannot be **LEGALLY** occupied until a certificate of occupancy has been issued. The certificate of occupancy is the **LEGAL** notification from the Department of Building Standards that the building may be occupied for its intended use.

When the building official grants a certificate of occupancy it does not necessarily indicate that no violations of the code exist. Be sure that you request a final inspection, and when approved, request your certificate of occupancy so that the structure may be occupied.

EARTHQUAKE LOADS INTERNATIONAL BUILDING CODES

The Department of Building Standards is frequently asked what seismic zone is Columbia County. When designing a commercial structure seismic design category is one of the first structural design factors that should be considered. It is even needed to determine if a building is exempt from seismic design. The following examples should be helpful determining a structure's seismic design category.

Step 1. Determine the mapped maximum considered earthquake spectral response acceleration at short periods, S_s and at 1-second period, S_1 for the site location from Code Figures 1615(1) through 1615 (10).

Step 2. Determine the soil site class in accordance with Table 1615.1.1.

Step 3. Determine the site coefficients F_a and F_v from Tables 1615.1.2.(1) and 1615.1.2(2), respectively.

(Continued on page 4)





**CAB
Meeting**

May 19th

4:00 PM

**Evans
Auditorium**

We're on the WEB

@

www.co.columbia.ga.us

Columbia County
Engineering & Environmental
Services Department
630 Ronald Reagan Dr.
P.O. Box 498
Evans, GA 30809

Phone: (706) 868-3420
Fax: (706) 868-3381

(Continued from page 3)

Step 4. Determine the 5% damped design spectral response acceleration at short periods, S_{DS} , and at 1-second period, S_{D1} as follows:

$$S_{DS} = (2/3)(F_a)(S_s)$$

$$S_{D1} = (2/3)(F_v)(S^{\wedge})$$

Step 5. Determine seismic use group in accordance with Table 1604.5 and Section 1616.2. Note a to the table indicates that "category" is equivalent to "seismic use group." Therefore, Categories I through III correspond to Seismic Use Groups I through III. Category IV is considered to be included in Group I.

Step 6. Determine the seismic design category as prescribed by Tables 1616.3(1) and 1616.3(2). The highest of the seismic design categories from the two tables is the category assigned to the building. For example, if the seismic design category from Table 1616.3(1) was "D" and from Table 1616.3(2) was "C", then the building would be assigned a Seismic Design Category "D".